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s o l i c i t a t i o n  
p a c k a g e



# Water Use Efficiency Program

January 2, 2001





# **Water Use Efficiency Program**

## **Proposal Solicitation Package**

**January 2, 2001**

You are invited to submit a proposal for funding of a Water Use Efficiency Project.

### **Proposal Due Date:**

**3:00 P.M., FEBRUARY 15, 2001  
MUST BE RECEIVED, NOT POST-  
MARKED, BY THIS TIME AND DATE.**

### **Submit Proposals To:**

- ▶ Water Use Efficiency Office  
California Department of Water Resources  
1020 Ninth Street, third floor  
Sacramento, CA 95814

Submit one original, ten photocopies, and one electronic copy of the proposal on a 3.5-inch disk in any version of Word.

### **Questions? Contact:**

- ▶ Marsha Prillwitz  
Water Use Efficiency Office  
California Department of Water Resources  
1020 Ninth Street, Third Floor  
Sacramento, CA 95814  
(916) 327-1645  
marshap@water.ca.gov

For an electronic copy of this package please go to this Web site: [www.water.ca.gov](http://www.water.ca.gov).

**California Department of Water Resources  
and U.S. Bureau of Reclamation**

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# 1—Background

The CALFED Bay-Delta Program is a cooperative effort of State and federal agencies with management or regulatory responsibilities for the Bay-Delta. This effort has resulted in a long-term, comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system.

The overall CALFED goal is to insure that California's water supplies are used efficiently and achieve multiple benefits. The Program has four major objectives:

- ▶ **Ecosystem Quality.** Improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta to support sustainable populations of diverse and valuable plant and animal species.
- ▶ **Water Supply.** Reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta.
- ▶ **Water Quality.** Provide good water quality for all beneficial uses.
- ▶ **Levee System Integrity.**

For more information about the CALFED Bay-Delta Program, call (916) 657-2666, or visit the CALFED Web site at <http://calfed.ca.gov>.

This Proposal Solicitation Package (PSP) is being released subject to funding availability and the terms of the authorizing legislation to promote the objectives of the CALFED Bay-Delta Program's Programmatic Record of Decision and Implementation Memorandum of Understanding (ROD), issued August 28, 2000. Through the ROD, CALFED agencies committed to identify and fund the most promising Water Use Efficiency projects.

This PSP is for funding to support implementation of Water Use Efficiency Projects. The California Department of Water Resources as the lead and the U.S. Bureau of Reclamation are responsible for issuance of this PSP, the proposal review and selection process, and administration of this program. No federal funds are available for the program at this time.

## 2—Water Use Efficiency Program Goals

The goal of the Water Use Efficiency Program is to accelerate the implementation of cost-effective actions to conserve and recycle water throughout the State.

Actions funded under this program are designed to preserve local flexibility; use incentive-based actions; build on existing water use efficiency programs; and provide assurances of high water use efficiency.

## 3—Water Use Efficiency Program Priorities

Projects for agricultural and urban water use efficiency shall demonstrate contributions toward any or all of the CALFED objectives by reducing irrecoverable water losses; attaining water quality benefits; and/or attaining environmental benefits.

This may be accomplished through the implementation of established Urban Best Management Practices or Agricultural Efficient Water Management Practices that demonstrate a potential for achieving CALFED objectives. Or, the applicant may propose a broader or different approach to water use efficiency with an emphasis on linkage to CALFED objectives and the expected outcomes and benefits of the project.

For urban water use efficiency, the California Urban Water Conservation Council's (CUWCC) Memorandum of Understanding process outlines Best Manage-

ment Practices to achieve water use efficiency. For more information on Best Management Practices, see Attachment A or contact the CUWCC at [www.cuwcc.org](http://www.cuwcc.org), or call (916) 552-5885.

For agricultural water use efficiency, the Agricultural Water Management Council's (AWMC) Memorandum of Understanding process outlines Efficient Water Management Practices. For more information on Efficient Water Management Practices, see Attachment B or call the AWMC at (916) 327-1675.

Agricultural water use efficiency projects that incorporate CALFED's Quantifiable Objectives will be given extra weight in the selection process. For more information about Quantifiable Objectives, see Attachment C or contact CALFED's Water Use Efficiency Program Manager, Tom Gohring, at [gohring@water.ca.gov](mailto:gohring@water.ca.gov), (916) 653-3790.

## 4—Selection Criteria

Proposals will be reviewed according to the following criteria:

- ▶ Relevance and Importance (Section B1, B2, B3 of Proposal Package)—25 Points
- ▶ Technical/Scientific Merit, Feasibility, Monitoring, and Assessment (Sections B4, B5, B6 of Proposal Package)—25 Points
- ▶ Outreach, Community Involvement, and Information Transfer (Section C of Proposal Package)—15 Points
- ▶ Qualifications of the Applicants, Cooperators, Establishment of Partnerships (Section D of the Proposal Package)—15 Points
- ▶ Costs and Benefits (Section E of the Proposal Package)—20 Points

## 5—Proposal Review, Selection, and Award Process

First, a panel of interagency and independent experts will review applications based on the selection criteria in Section 4. Then the panel will evaluate projects from a statewide perspective to facilitate good geographic and topical distribution of funds. Proposals will be reviewed and rated in groups within each category—agricultural and urban.

Projects identified as potential funding recipients will be submitted to the CALFED Water Use Efficiency Public Advisory Committee (PAC) and CALFED Policy Group for their recommendations. The PAC will consist of representatives of local agricultural and urban water districts, tribal interests, environmental justice organizations, public interest groups, and other stakeholders. Funding agencies will be responsible for final funding decisions, notifications, contract negotiations, and project management.

Awards will be made directly to the applicant submitting the proposal. The target award period for State funded projects is April 1, 2001 through June 30, 2001. The project start date for State funded projects shall be no later than August 1, 2001.

The schedule for this process is as follows:

1/2/01	Proposal Solicitation Package released
2/15/01	Proposals received
2/16/01	Proposals to reviewers
2/22-2/23/01	Review panel convenes, prioritizes projects, submits recommendations to funding agencies

3/1/01	List of proposed projects submitted to CALFED Management Group and Water Use Efficiency PAC for review and concurrence
3/15/01	Funding agency makes final decision and announces results
3/16/01	Contract negotiations begin
6/15/01	Final contracts executed, funds obligated
6/15-8/1/01	Projects begin

## 6—Applicant Eligibility

Any legally recognized public, private, or tribal entity with an interest in water use efficiency may submit a proposal. Such entities include, but are not limited to water districts; State, federal, or local government agencies; Indian tribes; watershed management groups; groundwater management associations; nonprofit organizations; environmental organizations; universities; and private entities.

An application may be submitted by a single entity or a group of entities. Collaborative regional partnerships for projects are encouraged, especially where multiple benefits and economies of scale can be demonstrated. Applications that involve joint venture partnerships shall identify one partner as the contracting party responsible for payments, reporting, and accounting. If subcontractors are to be used, they shall also be identified in the application.

Applicants may submit proposals for any water use efficiency projects that contribute toward CALFED Program Objectives as listed in Section 1. Water recycling (*water reuse or water reclamation*) projects will not be funded under this program, but may receive funding through the CALFED Recycling

Program that is being administered by the State Water Resources Control Board. For more information, contact the State Board at [www.swrcb.ca.gov](http://www.swrcb.ca.gov).

## 7—Duration of Projects

The State or Federal share of project funds shall be expended within three years of the execution of the contract. If the project exceeds one year in duration, a budget with discrete 12-month periods shall be provided.

## 8—State and Federal Funds

Funds for the Water Use Efficiency Program are expected to come from State and federal sources. Each funding source retains the authority, rules, and various responsibilities that pertain to it.

Funding for this PSP is pending approval by the State Legislature. Upon legislative approval and, consistent with the terms of the authorizing legislation, the California Department of Water Resources will commit funding for Water Use Efficiency projects during this funding cycle. At present, no federal funds are available for this PSP. If Federal funds become available, they will be disbursed through the U.S. Bureau of Reclamation.

Available funds will be split approximately 50-50 between agricultural and urban projects.

There are no per project funding limitations anticipated.

Proposals may be considered for partial funding to increase the number of projects to be funded or to allow for a reasonable geographic distribution of projects.

Proposals shall not use funds to replace existing funding sources for on-going projects, for political advocacy, or for an applicant's litigation costs.

## 9—Applicant Cost Share

The applicant cost share will be based on the split between applicant benefits and CALFED benefits.

If a proposal is selected for funding, the applicant shall provide an institutional cost-sharing agreement (*letter of commitment of cost share funds*) signed by an official authorized to commit the applicant to all or part of the cost share or a letter authorizing third party, in-kind contribution signed by an official authorized to commit the third party. The letter of commitment of cost share funds shall be provided prior to issuance of the award.

The applicant cost share shall be obligated during the period of performance.

The applicant cost share shall be met during each 12-month budget period.

The applicant cost share may contain indirect costs and non-federal salaries and benefits.

## 10—Proposal Package Contents

Each proposal package shall be received by 3:00 p.m., February 15, 2001 at the Water Use Efficiency Office, California Department of Water Resources, 1020 Ninth Street, Sacramento, California 95814. A complete proposal package consists of the following items **A** through **E**:

- A. Cover Sheet**
- B. Scope of Work**
- C. Outreach, Community Involvement, and Information Transfer**
- D. Qualifications of the Applicants, Cooperators, and Establishment of Partnerships**

### **E. Costs and Benefits**

Budget Summary and Breakdown

Budget Justification

Benefit Summary and Breakdown

Assessment of Costs and Benefits

*(Items **F** through **H** are required only if the proposal is selected for funding.)*

### **F. Matching Funds Commitment Letter**

### **G. Letter of Concurrence**

### **H. Environmental Documentation**

*(**Note:** The entire proposal package shall be in 12 point font or larger. The proposal package, items **A** through **E**, shall not exceed 12 single-spaced pages. The budget breakdown, resumes, notice letters, and letters of support are not included in the 12 page limit. This proposal package will be appended to the contract, if the project is selected for funding.)*



**A. Cover Sheet** *(Attach to front of proposal.)*

1. Specify: ☐ agricultural project or ☐ individual application or  
☐ urban project ☐ joint application
2. Proposal title—concise but descriptive: \_\_\_\_\_  
\_\_\_\_\_
3. Principal applicant—organization or affiliation: \_\_\_\_\_  
\_\_\_\_\_
4. Contact—name, title: \_\_\_\_\_  
\_\_\_\_\_
5. Mailing address: \_\_\_\_\_  
\_\_\_\_\_
6. Telephone: \_\_\_\_\_
7. Fax: \_\_\_\_\_
8. E-mail: \_\_\_\_\_
9. Funds requested—dollar amount: \$ \_\_\_\_\_
10. Applicant cost share funds pledged—dollar amount: \$ \_\_\_\_\_
11. Duration—(month/year to month/year): \_\_\_\_\_ to \_\_\_\_\_
12. State Assembly and Senate districts and Congressional district(s) where the project is to be conducted:  
\_\_\_\_\_  
\_\_\_\_\_
13. Location and geographic boundaries of the project: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
14. Name and signature of official representing applicant. By signing below, the applicant declares the following:  
— the truthfulness of all representations in the proposal;  
— the individual signing the form is authorized to submit the application on behalf of the applicant;  
— the applicant will comply with contract terms and conditions identified in Section 11 of this PSP.

\_\_\_\_\_  
(printed name of applicant)

\_\_\_\_\_  
(date)

\_\_\_\_\_  
(signature of applicant)



## **B. Scope of Work**

The scope of work shall consist of the following elements:

### ***Relevance and Importance***

1. Abstract (Executive Summary). Provide a brief description of the project, methods, and objectives.
2. Statement of critical local, regional, Bay-Delta, State or federal water issues, which includes an explanation of the need for the project, who wants it, and why. Describe how this project would be consistent with local or regional water management plans or other resource management plans.
3. Nature, scope, and objectives of the project. If applicable, include information about which Quantifiable Objective(s) will be addressed. (Please see Attachment C.)

### ***Technical/Scientific Merit, Feasibility, Monitoring, and Assessment***

4. Methods, procedures, and facilities. Provide information to permit evaluation of the technical adequacy of the approach to satisfy the objectives.
5. Schedule. Provide a simple bar chart schedule with tasks, deliverable items, due dates, and projected costs for each task, along with a quarterly expenditure projection. This schedule will form the basis of the required quarterly and annual project fiscal and programmatic reports, should the project be funded.
6. Monitoring and assessment. Describe the monitoring and assessment procedures that will be used to document progress and determine the success of the project. Include information about how the data and other

information will be handled, stored, and made accessible.

## **C. Outreach, Community Involvement, and Information Transfer**

1. Describe outreach efforts to contact and involve participation from people in disadvantaged communities. Describe efforts to extend the benefits of the project to people in disadvantaged communities and develop partnerships, as appropriate. Describe efforts to involve and extend the benefits of the project to tribal entities in the area.
2. Training, employment, and capacity building potential. Estimate the number and level of people or organizations that are expected to receive training, employment, or capacity building benefits from the project.
3. Describe the plan for disseminating information on the results of the project and promoting their application.
4. Provide a copy of the letter sent to the local land use entity, water district, or other potentially impacted or cooperating agencies notifying them of the proposal.

## **D. Qualifications of the Applicants, Cooperators, and Establishment of Partnerships**

1. Include a resume(s) of the project manager(s). Resumes shall not exceed two pages.
2. Identify and describe the role of any external cooperators that will be used for this project.
3. Provide information about partnerships developed to implement the project.

## E. Costs and Benefits

1. Budget summary and breakdown. Provide a detailed budget that includes the following line items. (Indicate the amount of cost sharing for each element as well as direct and indirect costs):
  - a. salaries and wages
  - b. fringe benefits
  - c. supplies
  - d. equipment
  - e. services or consultants
  - f. travel
  - g. other direct costs including planning, design, construction, maintenance, etc.
  - h. total estimated costs; total items (a through g)
2. Budget Justification. Provide a brief explanation for the labor costs (including consultants), equipment, supplies, and travel included in the budget.
3. Benefit Summary and Breakdown. List expected project outcomes (the physical changes that will occur as a result of the project) and expected benefits (the value of those outcomes).
  - a. Quantify project outcomes and benefits. Quantify outcomes and benefits to the degree possible. For example, if the expected outcome of a project is to reduce dry-year demands in a particular region, the amount and value (benefit) of this reduction should be listed if known.

Indicate how each quantified outcome and benefit will be shared among the project's beneficiaries. For example, if an outcome will result in an avoided cost benefit for the applicant and/or the project partners, this should be identified as an applicant benefit. Identify and delineate

quantified outcomes and benefits expected to directly or indirectly benefit the CALFED program.

- b. For project outcomes and benefits that are not quantifiable, provide a qualitative description of such project outcomes and benefits. List and describe verbally all outcomes or benefits that cannot be quantified at present. One way to describe the significance of a project's non-quantified benefits is in terms of institutional, public, or scientific recognition.

Indicate how each non-quantified outcome or benefit will be shared among the project beneficiaries. Identify and delineate non-quantified outcomes expected to directly or indirectly benefit the CALFED program.

4. Assessment of Costs and Benefits. Include an assessment that summarizes the costs and benefits of the proposed project. The assessment shall adhere to the following general guidelines:
  - a. List and explain all major analysis assumptions.
  - b. Express all benefits and costs in year 2000 dollars. Do not adjust future dollar values for expected general inflation.
  - c. Convert all costs and benefits to their present value equivalents prior to aggregating them. Use a six percent discount rate.
  - d. Compile a table showing the present value of the quantified costs and benefits for the applicant, each project beneficiary, CALFED, and any other parties affected

by the project. Compile a summary of the non-quantified costs and benefits to the applicant, each project beneficiary, CALFED, and any other parties affected by the project.

The applicant will be required to provide the following items if the proposal is selected for funding. These items are not required to be submitted with the proposal.

**F. Matching Funds Commitment Letter**

Provide an institutional cost-sharing agreement (letter) signed by an official authorized to commit the applicant to all or part of the matching share or a letter authorizing third party, in-kind contribution signed by an official authorized to commit the third party.

**G. Letter of Concurrence from Local Government**

The applicant shall provide a letter signed by an official authorized to declare that this project is compatible with existing programs, the local general plan, or other local or regional activities.

**H. Environmental Documentation**

Prior to the disbursement of any funds, the applicant shall provide documentation that the project complies with environmental laws and regulations and that necessary permits have been obtained. For projects that require environmental documentation, such documentation may tier off of the CALFED Programmatic EIS/EIR, and incorporate appropriate mitigation measures from the Record of Decision. For more information, contact Chuck Vogelsang at (916) 653-2536 or [chuckv@water.ca.gov](mailto:chuckv@water.ca.gov).

For projects that receive federal funding at a future date, applicants shall provide draft environmental documentation to the U.S. Bureau of Reclamation.

The Bureau will issue the necessary NEPA documents based on the applicant's draft materials.

## **11—Contract Terms and Conditions**

The following terms and conditions will be included in an agreement with the funding agency. Other terms may also apply.

**Project Tracking**—The contractor shall submit project reports (fiscal and programmatic) on a quarterly basis and file a final report upon the completion of the project. In the Quarterly Progress Report, information is to be included on the completion percentage of each task and any issues that might prevent the work from being completed on schedule.

**Monitoring**—The contractor agrees to submit, at a minimum, an annual written monitoring report presenting findings and addressing project progress.

**Project Presentations**—The contractor acknowledges that they may be asked to provide an oral or written presentation regarding project status and findings at least once annually, upon request.

**Payment Schedule**—No funds will be disbursed by the funding agency to the contractor without:

1. an executed copy of the Agreement;
2. receipt of an original invoice with supporting documentation; and
3. receipt and satisfactory completion of, or progress toward completion of, deliverables and/or phases of work as set forth in the Agreement, including quarterly financial and programmatic reports.

Payments shall be in arrears as soon as State procedures allow upon receipt of an undisputed invoice by the funding agency.

**Rights in Data**—All data and information obtained and/or received shall be in the public domain. The contractor shall not sell or grant rights to a third party who intends to sell such product as a profit-making venture. The contractor shall have the right to disclose, disseminate, and use, in whole or in part, any final form data and information received, collected, and/or developed under the contract. The contractor must obtain prior approval from the funding agency to use draft data. Permission to use draft data will not be unreasonably withheld. The funding agency will not disseminate draft data, but may make draft data available to the public upon request with an explanation that the data have not been finalized.

**Acknowledgment of Credit**—The contractor shall include appropriate acknowledgment of credit to the funding agency, to the CALFED Program, and to all cost-sharing partners for their support when using any data and/or information developed under the contract.

**Indemnification**—The contractor shall indemnify, defend, and hold harmless the CALFED agencies, the State of California, the Resources Agency, the Department of Water Resources, and the National Fish and Wildlife Foundation and their officers, agents, and employees from any and all claims and losses accruing or resulting to any or all contractors, subcontractors, material persons, laborers, and any other person, firm, or corporation furnishing or supplying work services, materials, or supplies in connection with the performance of this contract, and from any and all claims and losses accruing or resulting to any person, firm, or corporation who may be injured or damaged by the contractor in the performance of this contract.

**Dispute Resolution**—Any claim that the contractor may have regarding the performance of the contract including, but not limited to, claims for additional compensation or extension of time, shall be submitted to the funding agency within thirty days of its accrual. The funding agency and contractor shall then attempt

to negotiate a resolution of claim and process an amendment to the contract to implement the terms of any such resolution.

**Conflict of Interest**—All applicants are subject to State and federal conflict of interest laws. An applicant may not permit any State or federal employee to use his or her position for a purpose that is or gives the appearance of being in conflict of interest, either by giving the applicant an unfair advantage or by a desire for private financial gain. Applicants shall not have a representative of their entity serve on the proposal Review Panel or the Water Use Efficiency Public Advisory Committee during deliberations regarding the PSP.

**Indian Trust Assets**—Applicants for federally funded projects must evaluate impacts to Indian Trust Assets and determine if there will be any adverse impact to such assets. The results of this assessment must accompany the proposal. Indian trust assets are legal interests in assets held in trust by the United States for Indian tribes or individuals. Those assets include land, water rights, minerals, and other natural resources and incomes derived from these assets. Examples of Indian trust assets include reservations, rancherias, public domain allotments, water, fish, timber, and other resources. (There are no federal funds available for this program at this time, but if federal funds become available at a later time, this requirement would need to be met.)

## **Attachment A— Best Management Practices from the Memorandum of Understanding Regarding Urban Water Conservation in California**

1. water survey programs for single-family residential and multifamily residential customers
2. residential plumbing retrofit
3. system water audits, leak detection and repair
4. metering with commodity rates for all new connections and retrofit of existing connections
5. large landscape conservation programs and incentives
6. high-efficiency washing machine rebate programs
7. public information programs
8. school education programs
9. conservation programs for commercial, industrial, and institutional (cii) accounts
10. wholesale agency assistance programs
11. conservation pricing
12. conservation coordinator
13. water waste prohibition
14. residential ultra low flush toilet replacement programs

### **Potential Best Management Practices**

1. rate structure and other economic incentives and disincentives to encourage water conservation
2. efficiency standards for water using appliances and irrigation devices
3. replacement of existing water using appliances (except toilets and showerheads whose replacements are incorporated as Best Management Practices) and irrigation devices
4. retrofit of existing car washes
5. graywater use
6. distribution system pressure regulation
7. water supplier billing records broken down by customer class
8. swimming pool and spa conservation including covers to reduce evaporation
9. restrictions or prohibitions on devices that use evaporation to cool exterior spaces
10. point of use water heaters, recirculating hot water systems, and hot water pipe insulation
11. efficiency standards for new industrial and commercial processes

For more information, please see the California Urban Water Conservation Council Web site at [www.cuwcc.org](http://www.cuwcc.org).

# **Attachment B— Efficient Water Manage- ment Practices by Agricul- tural Water Suppliers in California from the Memo- randum of Understanding of the Agricultural Water Management Council**

## **List A—Generally Applicable Efficient Water Management Practices**

1. Prepare and adopt a Water Management Plan using as a guideline Exhibit B of this Memorandum of Understanding for Agricultural Water Suppliers.
2. Designate a Water Conservation Coordinator.
3. Support the availability of water management services to water users.
4. Where appropriate, improve communication and cooperation among water suppliers, water users, and other agencies.
5. Evaluate the need, if any, for changes in policies of the institutions to which the water supplier is subject.
6. Evaluate and improve efficiencies of water suppliers' pumps.

## **List B—Conditionally Applicable Efficient Water Management Practices**

1. Facilitate Alternative Land Use.
2. Facilitate use of available recycled water that otherwise would not be used beneficially, meets all health and safety criteria, and does not cause harm to crops or soils.
3. Facilitate the financing of capital improvements for on-farm irrigation systems.
4. Facilitate voluntary water transfers that do not unreasonably affect the water user, water supplier, the environment, or third parties.
5. Line or pipe ditches and canals.
6. Increase flexibility in water ordering by, and delivery to, the water users within operational limits.
7. Construct and operate water supplier spill and tailwater recovery systems.
8. Optimize conjunctive use of surface water and groundwater.
9. Automate canal structures.

## **List C—Other Efficient Water Management Practices**

1. water measurement and water use report
2. pricing or other incentives

For more information please call the Agricultural Water Management Council at (916) 327-1775.



## **Attachment C— Summary of Quantifiable Objectives**

This attachment provides a summary of Quantifiable Objectives which can be used to determine the potential CALFED benefits of a proposed agricultural Water Use Efficiency (WUE) project.

Quantifiable Objectives are CALFED's estimates of the practical and cost-effective contribution agriculture WUE can make towards goals related to water supply reliability, water quality, and ecosystem restoration (through improved in-stream flows). In developing their proposal, a local entity may choose to address all or a portion of a Quantifiable Objective.

The Quantifiable Objectives are specific for each of 21 Sub-Regions in the Central Valley (Figure 1). Because proposing entities may represent areas that are smaller than a given Sub-Region, proposals may address a proportionally lesser amount of a Quantifiable Objective. Local entities may also wish to address a portion of a Quantifiable Objective for a variety of other reasons such as perceived data uncertainty or local political issues.

The concepts and approaches articulated in this summary have been developed with significant input from stakeholders and a multi-disciplinary Technical Team with expertise in water conservation, water quality, resource economics, irrigation engineering and local operations. However, much of the technical work summarized here is preliminary and may be revised as CALFED's WUE program is implemented and new information is developed. The underlying desired outcomes of the Quantifiable Objectives were drawn from existing CALFED documents, the State's Impaired Water Body list (303d), and discussions with local agricultural representatives.

CALFED has identified 196 potential Quantifiable Objectives. However, at this time, sufficient data exists to complete only 55 Quantifiable Objectives. CALFED expects to complete about 60 more Quantifiable Objectives by the end of 2001. The data required to complete the remaining (approximately 80) Quantifiable Objectives is not expected to be available for several years.

### **Using Quantifiable Objectives in Proposals**

Table 1 provides a list of the completed Quantifiable Objectives. To make a strong linkage to a Quantifiable Objective, a proposal should include the Quantifiable Objective number and title, the actions or practices proposed for addressing the Quantifiable Objective and the intended quantitative progress towards the Quantifiable Objective for different conditions.

If you are considering addressing a Quantifiable Objective in your proposal, you are encouraged to obtain the following document at [www.calfed.water.ca.gov](http://www.calfed.water.ca.gov) or by request at (916) 653-3790:

### **► Details of Quantifiable Objectives**

### **Using Priority Outcomes in Proposals**

Several Outcomes have been identified as high priority even though Quantifiable Objectives have not been defined for them yet. Proposals that address these Priority Outcomes will receive extra weight in the proposal selection process (but not as much weight as proposals demonstrating progress towards completed Quantifiable Objectives). Although insufficient data is available to define Quantifiable Objectives for these Outcomes, immediate progress in these areas is desired.

For more information on these Outcomes, please obtain the following document on the internet at

www.calfed.water.ca.gov or request by phone at (916) 653-3790:

► ***Details of Quantifiable Objectives***

**Obtaining Assistance with Quantifiable Objectives**

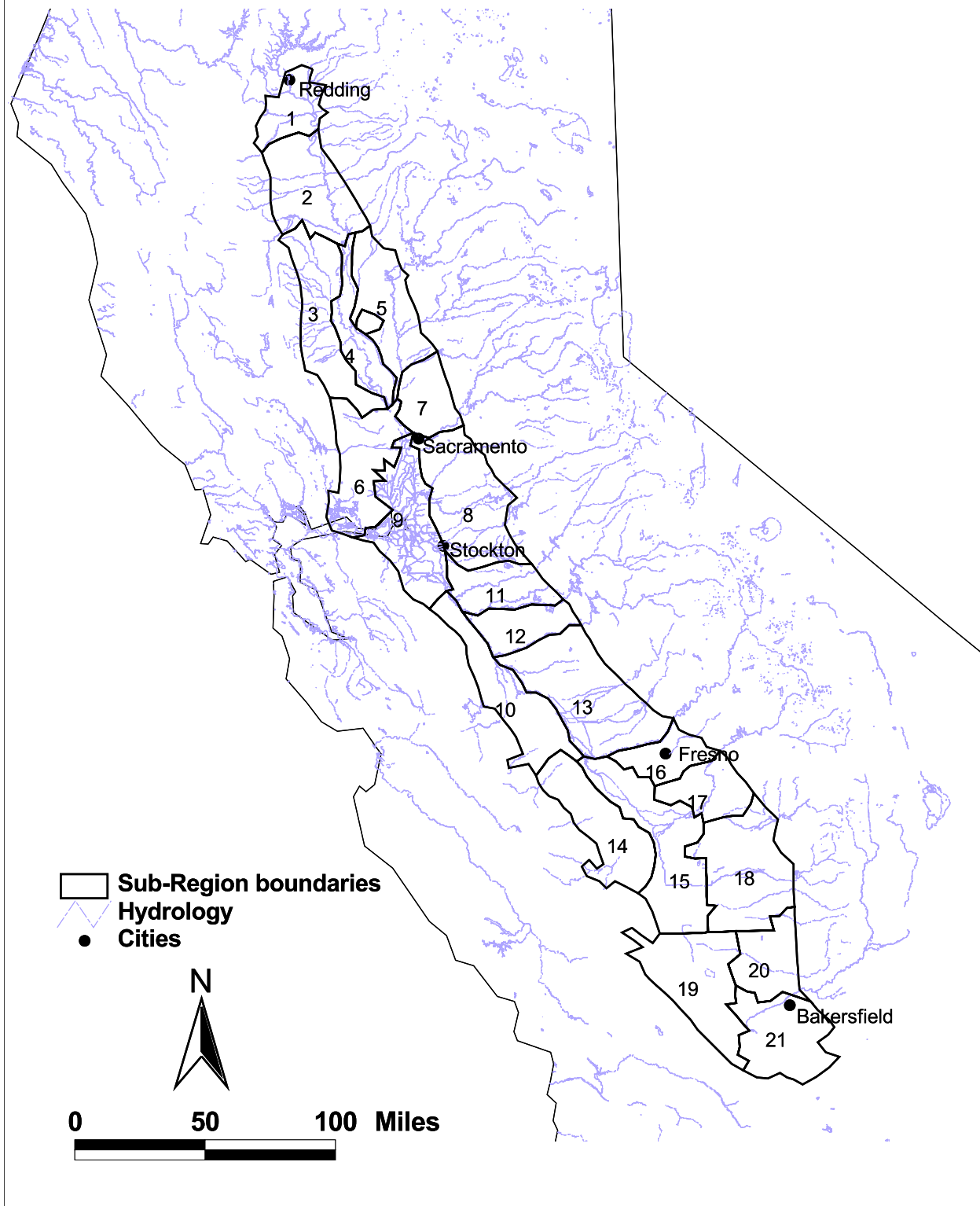
CALFED agencies plan to hold the following workshops to provide more information on the proposal solicitation process:

- January 8, 2001—Modesto Irrigation District, Modesto
- January 9, 2001—Preservation Park, Oakland
- January 11, 2001—Metropolitan Water District of Southern California, Los Angeles

In addition, CALFED staff will be available to answer questions (by phone or in person) about how to interpret and use Quantifiable Objectives.

For more information on Quantifiable Objectives or to schedule an individual information session, please contact Tom Gohring at (916) 653-2782 or by email at [gohring@water.ca.gov](mailto:gohring@water.ca.gov).

Figure 1. Sub-Region Boundaries for Quantifiable Objectives



**Table 1. Summary of Completed Quantifiable Objectives**

<b>Sub-Region</b>	<b>Number<sup>1</sup></b>	<b>Intended Outcome<sup>2</sup></b>	<b>Location</b>	<b>Quantifiable Objective<sup>3</sup> (TAF/yr)</b>
1	6	Provide flow to improve aquatic ecosystem conditions	Sacramento River	44 - 180
	7	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	6.5
2	13	Provide flow to improve aquatic ecosystem conditions	Sacramento River	44 - 180
	18	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	6.6
3	20	Provide flow to improve aquatic ecosystem conditions	Sacramento River	44 - 180
	25	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	5.1
	27	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Wetlands	7.9
4	30	Provide flow to improve aquatic ecosystem conditions	Sacramento River	44 - 180
	33	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	4.6
	35	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Wetlands	4.5
5	38	Provide flow to improve aquatic ecosystem conditions	Feather River	2.9 - 54
	39	Provide flow to improve aquatic ecosystem conditions	Yuba River	1 - 5.6
	46	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	11.1
	48	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Wetlands	10.5
6	53	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	5
	54	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Wetlands	<1
7	55	Provide flow to improve aquatic ecosystem conditions	American River	1.8 - 31.2
	56	Provide flow to improve aquatic ecosystem conditions	Bear River	56.1 - 58.7
	57	Provide flow to improve aquatic ecosystem conditions	Sacramento River	44 - 180
	63	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	<1
	65	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Wetlands	1
8	66	Provide flow to improve aquatic ecosystem conditions	Calaveras River	<1
	67	Provide flow to improve aquatic ecosystem conditions	Cosumnes River	0.6 - 1.5
	68	Provide flow to improve aquatic ecosystem conditions	Mokelumne River	2.3
	71	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	8.3
	73	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Wetlands	<1
9	75	Provide flow to improve aquatic ecosystem conditions	Sacramento River	44 - 180
	88	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	6.6
	89	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Wetlands	5

**Table 1. Summary of Completed Quantifiable Objectives**

<b>Sub-Region</b>	<b>Number<sup>1</sup></b>	<b>Intended Outcome<sup>2</sup></b>	<b>Location</b>	<b>Quantifiable Objective<sup>3</sup> (TAF/yr)</b>
10	106	Decrease flows to salt sinks to increase the water supply for beneficial uses	Drainage Problem Area	49-111
	107	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	8.7
	110	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Wetlands	2.3
11	113	Provide flow to improve aquatic ecosystem conditions	Stanislaus River	14 - 129.1
	114	Provide flow to improve aquatic ecosystem conditions	Toulumne River	13 - 43.3
	127	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	7.5
	129	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Wetlands	<1
12	130	Provide flow to improve aquatic ecosystem conditions	Merced River	1.9
	132	Provide flow to improve aquatic ecosystem conditions	Tuolumne River	13 - 43.3
	144	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	8.2
	146	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Wetlands	<1
13	147	Provide flow to improve aquatic ecosystem conditions	Merced River	1.9
	157	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	17.4
	160	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Wetlands	3.8
14	164	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	8.9
15	167	Decrease flows to salt sinks to increase the water supply for beneficial uses	All affected areas	<1
	168	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	6.1
16	176	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	7.3
17	180	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	14.2
18	183	Decrease flows to salt sinks to increase the water supply for beneficial uses	All affected areas	<1
	184	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	13.2
19	188	Decrease flows to salt sinks to increase the water supply for beneficial uses	All affected areas	<1
	189	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	4.5
20	193	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	8.1
21	196	Decrease flows to salt sinks to increase the water supply for beneficial uses	All affected areas	<1
	197	Decrease nonproductive ET to increase water supply for beneficial uses	All potential crops	6.4

<sup>1</sup>Numbers coincide with larger list of potential Quantifiable Objectives.

<sup>2</sup>Intended Outcomes are referred to as "Targeted Benefits" in other CALFED documents.

<sup>3</sup>A proposal may address all or a portion of a Quantifiable Objective.

For more information, please obtain the following document on the internet at [www.calfed.water.ca.gov](http://www.calfed.water.ca.gov) or request by phone at (916) 653-3790:

"Details of Quantifiable Objectives"

**Table 2. Summary of Priority Outcomes<sup>1</sup>**

<b>Sub-Region</b>	<b>Number<sup>2</sup></b>	<b>Intended Outcome<sup>3</sup></b>	<b>Location</b>
1	1	Provide flow to improve aquatic ecosystem conditions	Battle Creek
	2	Provide flow to improve aquatic ecosystem conditions	Bear Creek
	3	Provide flow to improve aquatic ecosystem conditions	Clear Creek
	5	Provide flow to improve aquatic ecosystem conditions	Cow Creek
2	15	Reduce pesticides to enhance and maintain beneficial uses of water	Sacramento River
	9	Provide flow to improve aquatic ecosystem conditions	Antelope Creek
	10	Provide flow to improve aquatic ecosystem conditions	Deer Creek
	11	Provide flow to improve aquatic ecosystem conditions	Mill Creek
	12	Provide flow to improve aquatic ecosystem conditions	Paynes Creek
3	22	Reduce pesticides to enhance and maintain beneficial uses of water	Colusa Basin
	23	Reduce pesticides to enhance and maintain beneficial uses of water	Sacramento River
	24	Reduce salinity to enhance and maintain beneficial uses of water	Colusa Basin
	29	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Salt affected soils
4	31	Reduce pesticides to enhance and maintain beneficial uses of water	Sacramento River
	83	Reduce pesticides to enhance and maintain beneficial uses of water	Sacramento Slough
5	41	Reduce pesticides to enhance and maintain beneficial uses of water	Feather River
	37	Provide flow to improve aquatic ecosystem conditions	Butte Creek
	42	Reduce salinity to enhance and maintain beneficial uses of water	Sacramento Slough near Verona
6	52	Reduce pesticides to enhance and maintain beneficial uses of water	Sacramento River
7	59	Reduce pesticides to enhance and maintain beneficial uses of water	Sacramento River
9	80	Reduce pesticides to enhance and maintain beneficial uses of water	Delta
	78	Reduce native constituents to enhance and maintain beneficial uses of water	Delta
	79	Reduce native constituents to enhance and maintain beneficial uses of water	San Joaquin River
	81	Reduce nutrients to enhance and maintain beneficial uses of water	Delta
	82	Reduce pesticides to enhance and maintain beneficial uses of water	San Joaquin River
	84	Reduce salinity to enhance and maintain beneficial uses of water	Delta
	85	Reduce pesticides to enhance and maintain beneficial uses of water	Sacramento River
	90	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Salt affected soils
10	101	Reduce pesticides to enhance and maintain beneficial uses of water	San Joaquin River
	96	Reduce native constituents to enhance and maintain beneficial uses of water	Mud and Salt Slough
	98	Reduce native constituents to enhance and maintain beneficial uses of water	San Joaquin River
	103	Reduce salinity to enhance and maintain beneficial uses of water	Mud and Salt Slough
	104	Reduce salinity to enhance and maintain beneficial uses of water	San Joaquin River at Vernalis

**Table 2. Summary of Priority Outcomes<sup>1</sup>**

<b>Sub-Region</b>	<b>Number<sup>2</sup></b>	<b>Intended Outcome<sup>3</sup></b>	<b>Location</b>
11	120	Reduce pesticides to enhance and maintain beneficial uses of water	San Joaquin River
	121	Reduce pesticides to enhance and maintain beneficial uses of water	Stanislaus River
12	137	Reduce pesticides to enhance and maintain beneficial uses of water	San Joaquin River
13	152	Reduce pesticides to enhance and maintain beneficial uses of water	San Joaquin River
	161	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Salt affected soils
14	166	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Salt affected soils
15	170	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Salt affected soils
16	178	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Salt affected soils
17	182	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Salt affected soils
18	187	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Salt affected soils
19	192	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Salt affected soils
20	195	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Salt affected soils
21	199	Provide long-term diversion flexibility to increase the water supply for beneficial uses	Salt affected soils

<sup>1</sup>Proposals that address these priority Outcomes will receive extra weight in the proposal selection process (but not as much weight as proposals demonstrating progress towards Quantifiable Objectives). Although insufficient data is available to define Quantifiable Objectives for these Outcomes, immediate progress in these areas is desired.

<sup>2</sup>Numbers coincide with larger list of potential Quantifiable Objectives.

<sup>3</sup>Intended Outcomes are referred to as "Targeted Benefits" in other CALFED documents.

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## **Water Use Efficiency Office**

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